

Mineral Industry Surveys

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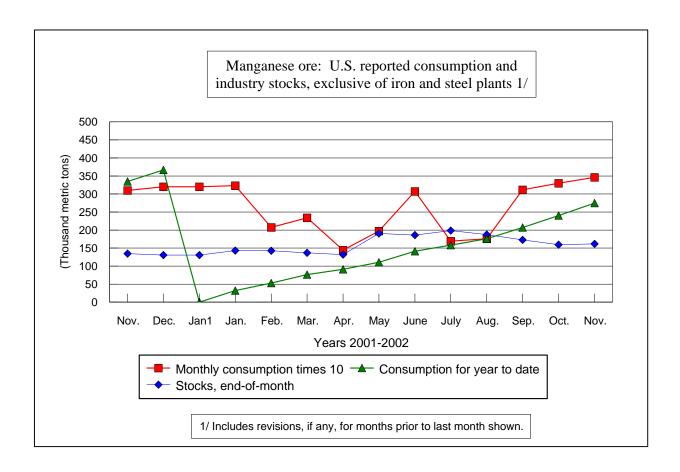
Internet: http://minerals.usgs.gov/minerals

MANGANESE IN NOVEMBER 2002

In November, reported consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was estimated as 34,600 metric tons (t), which was a 3% increase from that for the previous month, according to the U.S. Geological Survey. The figure for October increases to 37,000 t when estimates for annual respondents are added on the basis of 2001 data. Corresponding industry stocks of ore at the end of the month were 162,000 t, which includes an estimate for annual respondents on the basis

of 2001 data. This was an increase of 3% from that of the previous month. (Data for the most recent 13 months are plotted in the graph on page 2.)

Foreign trade data for November will appear in a subsequent report. The data for October tabulated in this report indicate that the total imports for consumption, on a manganese content basis, decreased by 12% from those for September 2002 (table 1). Total exports, on a manganese content basis, decreased by 38% from those for the previous month.



$\label{table 1} TABLE~1$ SELECTED U.S. FOREIGN TRADE IN MANGANESE 1/

(Metric tons, manganese content) 2/

	Impo	rts for consumption			Exports			
	Ore and	Ore and Ferroalloy		Ferroalloy				
	dioxide	and metal	Total	Ore	and metal	Total		
2001:								
October	3,120 3/	37,400 3/	40,500	360	1,770	2,130		
January-October	181,000	355,000	536,000	3,900	8,970	12,900		
2002:								
January	23,900	42,200	66,100	775	1,050	1,830		
February	34,400	29,700	64,000	453	774	1,230		
March	19,300	19,000	38,300	401	930	1,330		
April	34,600	35,500	70,100	775	919	1,700		
May	1,670	16,800	18,500	643	806	1,450		
June	36,100 3/	21,100	57,100	774	1,020	1,800		
July	23,600 3/	28,700	52,300	876	728	1,600		
August	15,000	34,900 3/	49,900	1,380	818	2,200		
September	14,600	36,600	51,200	121	1,230	1,360		
October	2,590 3/	42,300	44,900	159	680	839		
Total	206,000	307,000	512,000	6,360	8,960	15,300		

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

 ${\it TABLE~2}$ U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN OCTOBER 2002 1/

(Metric tons, unless otherwise specified)

					Year to date	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value	weight	content	value
Australia	11,600	7,650	\$4,820,000	46,000	30,500	\$19,000,000
Brazil				3	2	2,960
Canada				419	293	174,000
France				4,000	2,640	1,890,000
Georgia	4,970	3,480	2,560,000	9,840	7,160	4,740,000
India				770	424	446,000
Korea, Republic of				3,000	1,980	1,250,000
Mexico	1,650	1,080	779,000	6,450	4,220	3,100,000
Norway	2,800	1,620	1,720,000	11,200	6,600	6,800,000
Romania	5,050	3,330	2,590,000	12,300	8,130	5,940,000
Russia	4,250	2,850	2,020,000	4,250	2,850	2,020,000
South Africa	500	342	256,000	96,400	64,500	40,300,000
Spain				1,430	885	919,000
Total	30,900	20,400	14,700,000	196,000	130,000	86,600,000
Total, general imports	30,900	20,400	14,700,000	196,000	130,000	86,800,000

⁻⁻ Zero.

^{2/} As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

 $^{3/\,}All$ or part of these data have been referred to the U.S. Census Bureau for verification.

 $^{1/\,\}text{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 ${\bf TABLE~3}$ U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN OCTOBER 2002 1/

(Metric tons, unless otherwise specified)

Cross Mn Customs Customs						Year to date	
Canada		Gross	Mn	Customs	Gross	Mn	Customs
Canada - - - 25 20 \$19,700 China 20 26 \$18,400 1,850 1,720 1.840,000 Japan - - - 2,24 1,220 1,610,000 Mexico - - - 19 16 25,500 Norway - - - - 11 414 388,000 South Africa 744 659 735,000 4,700 4,220 5,600,000 Spain - - - 36 29 27,500 Total, low carbon 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 196-296 C: - - - 1,340 1,080 701,000 Medium carbon, 196-296 C: - - - 1,340 1,080 701,000 Brazil - - - 1,340 1,080 710,000 China - -	Source	weight	content	value	weight	content	value
China 20 26 \$18,400 1,850 1,720 1,840,000 Japan - - - - 2,240 1,220 1,610,000 Mexico - - - 19 16 25,500 Norway - - - 511 414 388,000 South Africa 744 659 735,000 4,700 4,320 5,600,000 Spain - - - - 36 29 27,500 Total, low carbon 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 1%-2% C: - - - - 1,340 1,080 701,000 Brazil - - - - 1,500 120 94 72,900 Brazil - - - - 1,500 1,200 796,000 Japan - - - - 1,500 1,200 796,000	Low carbon:						
Japan	Canada				25	20	\$19,700
Mexico - - - - 19 16 25,500 Norway - - - - 511 414 388,000 South Africa 744 659 735,000 4,700 4,320 5,600,000 Spain - - - - 36 29 27,500 Total, low carbon 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 1%-2%C: - - - 9,380 7,740 9,510,000 Brazil - - - 1,340 1,080 701,000 China - - - - 1,500 1,080 701,000 Brazil - - - - 1,500 1,200 796,000 Japan - - - - 1,500 1,200 786,000 Mexico 20 15 18,600 3,390 2,650 2,450,000	China	20	26	\$18,400	1,850	1,720	1,840,000
Norway	Japan				2,240	1,220	1,610,000
South Africa 744 659 735,000 4,700 4,320 5,600,000 Spain 36 29 27,500 Total, low carbon 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 1%-2% C: 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 1%-2% C: 18 14 10,300 120 94 72,900 Brazil 1,500 1,200 796,000 China 1,500 1,200 796,000 Korea, Republic of 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Spain	Mexico				19	16	25,500
Spain - - - - 36 29 27,500 Total, low carbon 764 685 753,000 9,380 7,740 9,510,000 Total, general imports of low carbon 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 1%-2% C: 8 8 1 10,300 120 94 72,900 Brazil - - - 1,340 1,080 701,000 China - - - 1,500 1,200 796,000 Japan - - - 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Mexico 20 15 11,600 13,00 16,00 9,30,000 South Africa 199 157 119,000 18,000 14,600 9,30,00 Spain - - - 652 407 477,00 Tota	Norway				511	414	388,000
Total, low carbon 764 685 753,000 9,380 7,740 9,510,000 Total, general imports of low carbon 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 1%-2% C: Austria 18 14 10,300 120 94 72,900 Brazil 1,540 1,080 701,000 China 1,500 1,200 796,000 Japan 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Mexico 20 15 118,600 3,390 2,650 2,450,000 Norway 2,280 1,780 1,940,000 Spain - 652 407 477,000 </td <td>South Africa</td> <td>744</td> <td>659</td> <td>735,000</td> <td>4,700</td> <td>4,320</td> <td>5,600,000</td>	South Africa	744	659	735,000	4,700	4,320	5,600,000
Total, general imports of low carbon 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 1%-2% C: 3 118 14 10,300 120 94 72,900 Brazil - - - 1,340 1,080 701,000 China - - - 1,500 1,200 796,000 Japan - - - - 22 18 22,900 Korea, Republic of - - - - 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Norway - - - - 2,280 1,780 1,040,000 Spain - - - - 652 407 477,000 Total, mc., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 237 186 148,000 28,800	Spain				36	29	27,500
of low carbon 764 685 753,000 9,380 7,740 9,510,000 Medium carbon, 1%-2% C:	Total, low carbon	764	685	753,000	9,380	7,740	9,510,000
Medium carbon, 1%-2% C: Austria 18 14 10,300 120 94 72,900 Brazil 1,340 1,080 701,000 China 1,500 1,200 796,000 Japan 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Norway 2,280 1,780 10,400 Spain 2,280 1,780 10,4000 Spain 652 407 477,000 Total, mc., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 237 186 148,000 28,800 23,100 15,700,000 High carbon: 2,840 2,730 1,220,000 5,890 3,030 2,3	Total, general imports						
Austria 18 14 10,300 120 94 72,900 Brazil 1,340 1,080 701,000 China 1,500 1,200 796,000 Japan 1,500 1,200 786,000 Korea, Republic of 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Norway 2,280 1,780 1,040,000 South Africa 199 157 119,000 18,000 14,600 9,330,000 Spain 652 407 477,000 Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 2,840 2,730 1,220,000 5,890 3,030 2,320,000 Hi	of low carbon	764	685	753,000	9,380	7,740	9,510,000
Brazil - - - 1,340 1,080 701,000 China - - - - 1,500 1,200 796,000 Japan - - - - 22 18 22,900 Korea, Republic of - - - 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Norway - - - 2,280 1,780 1,040,000 South Africa 199 157 119,000 18,000 14,600 9,330,000 Spain - - - - 652 407 477,000 Total, general imports - 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 2,840 2,730 1,220,000 5,890 3,030 2,320,	Medium carbon, 1%-2% C:				•		
China 1,500 1,200 796,000 Japan 22 18 22,900 Korea, Republic of 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Norway 2,280 1,780 1,040,000 South Africa 199 157 119,000 18,000 14,600 9,330,000 Spain 652 407 477,000 Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 237 186 148,000 28,800 23,100 15,700,000 High carbon: 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 1,210 919 343,000 2,510 1,900 <td< td=""><td></td><td>18</td><td>14</td><td>10,300</td><td>120</td><td>94</td><td>72,900</td></td<>		18	14	10,300	120	94	72,900
Japan	Brazil				1,340	1,080	701,000
Korea, Republic of Mexico 1,500 1,200 780,000 Mexico 20 15 18,600 3,390 2,650 2,450,000 Norway 2,280 1,780 1,040,000 South Africa 199 157 119,000 18,000 14,600 9,330,000 Spain 652 407 477,000 Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 2 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 2 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 10,500 8,1	China				1,500	1,200	796,000
Mexico 20 15 18,600 3,390 2,650 2,450,000 Norway 2,280 1,780 1,040,000 South Africa 199 157 119,000 18,000 14,600 9,330,000 Spain 652 407 477,000 Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 237 186 148,000 28,800 23,100 15,700,000 High carbon: 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 1,210 919 343,000 2,510 1,900 728,000 Australia 1,210 919 343,000 2,510 1,900 728,000 Brazil 10,500 8,190 4,500,000 18,300 <	Japan				22	18	22,900
Mexico 20 15 18,600 3,390 2,650 2,450,000 Norway 2,280 1,780 1,040,000 South Africa 199 157 119,000 18,000 14,600 9,330,000 Spain 652 407 477,000 Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 237 186 148,000 28,800 23,100 15,700,000 High carbon: 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 1,210 919 343,000 2,510 1,900 728,000 Australia 1,210 919 343,000 2,510 1,900 728,000 Brazil 10,500 8,190 4,500,000 18,300 <	Korea, Republic of				1,500	1,200	780,000
South Africa 199 157 119,000 18,000 14,600 9,330,000 Spain 652 407 477,000 Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: Ukraine 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: 3,030 2,320,000 2,510 1,900 728,000 Australia 1,210 919 343,000 2,510 1,900 728,000 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100	Mexico	20	15	18,600	3,390	2,650	2,450,000
Spain 652 407 477,000 Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: Ukraine 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: Australia 1,210 919 343,000 2,510 1,900 728,000 Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,52	Norway				2,280	1,780	1,040,000
Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Total, general imports of m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 237 186 148,000 28,800 23,100 15,700,000 Ukraine 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: Australia 1,210 919 343,000 2,510 1,900 728,000 Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,3	South Africa	199	157	119,000	18,000	14,600	9,330,000
Total, m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Total, general imports of m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: Australia 1,210 919 343,000 2,510 1,900 728,000 Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 </td <td>Spain</td> <td></td> <td></td> <td></td> <td>652</td> <td>407</td> <td>477,000</td>	Spain				652	407	477,000
of m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: Ukraine 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: Australia 1,210 919 343,000 2,510 1,900 728,000 Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon		237	186	148,000	28,800	23,100	15,700,000
of m.c., 1%-2% C 237 186 148,000 28,800 23,100 15,700,000 Medium carbon, 2%-4% C: Ukraine 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: Australia 1,210 919 343,000 2,510 1,900 728,000 Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon	Total, general imports						
Ukraine 2,840 2,730 1,220,000 5,890 3,030 2,320,000 High carbon: Australia 1,210 919 343,000 2,510 1,900 728,000 Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000		237	186	148,000	28,800	23,100	15,700,000
High carbon: Australia 1,210 919 343,000 2,510 1,900 728,000 Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	Medium carbon, 2%-4% C:						
Australia 1,210 919 343,000 2,510 1,900 728,000 Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	Ukraine	2,840	2,730	1,220,000	5,890	3,030	2,320,000
Austria 21 7 12,000 99 66 58,600 Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	High carbon:						
Brazil 10,500 8,190 4,500,000 18,300 14,300 7,460,000 Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	Australia	1,210	919	343,000	2,510	1,900	728,000
Canada 59 56 35,500 147 124 80,800 France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	Austria	21	7	12,000	99	66	58,600
France 25,600 21,000 9,250,000 India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	Brazil	10,500	8,190	4,500,000	18,300	14,300	7,460,000
India 4,000 3,040 1,900,000 23,700 18,000 9,610,000 South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports 50 10,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	Canada	59	56	35,500	147	124	80,800
South Africa 5,900 4,520 2,310,000 87,100 68,000 32,000,000 Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	France				25,600	21,000	9,250,000
Total, high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	India	4,000	3,040	1,900,000	23,700	18,000	9,610,000
Total, general imports of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	South Africa	5,900	4,520	2,310,000	87,100	68,000	32,000,000
of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000	Total, high carbon	21,600	16,700	9,110,000	157,000	123,000	59,200,000
of high carbon 21,600 16,700 9,110,000 157,000 123,000 59,200,000 Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000		,	*		,	*	
Grand total 25,500 20,300 11,200,000 201,000 157,000 86,700,000		21,600	16,700	9,110,000	157,000	123,000	59,200,000
			20,300	11,200,000	201,000		
	Grand total, general imports				•		

⁻⁻ Zero

 $1/\,\text{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

TABLE~4 U.S. IMPORTS OF MANGANESE ORE (20% OR MORE Mn) IN OCTOBER 2002 1/ 2/

(Metric tons)

	20% - 47%	20% - 47% Mn		or more	e Mn		Total		
	Gross	Mn	Gross		Mn	_	Gross	Mn	
Source	weight	content	weight		content		weight	content	
Belgium			18	3/	13	3/	18	13	
Brazil			34	3/	34	3/	34	34	
China			20	3/	20	3/	20	20	
Gabon			400	3/	400	3/	400	400	
Total			472		467		472	467	
Year to date:									
Australia			22,700		12,000		22,700	12,000	
Belgium			163		115		163	115	
Brazil	29,900	12,800	68		68		30,000	12,900	
China			20		20		20	20	
France			10		10		10	10	
Gabon	45,100	19,800	187,000		99,600		232,000	119,000	
Mexico	2,910	1,100					2,910	1,100	
Morocco			40		21		40	21	
South Africa			86,500		41,800		86,500	41,800	
Total	77,900	33,700	297,000		154,000		375,000	187,000	

⁻⁻ Zero.

Source: U.S. Census Bureau.

TABLE 5 U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN OCTOBER 2002 $1 \slash$

(Metric tons, gross weight, unless otherwise specified)

		Mangane	se dioxide		Manganese metal				
-			Year t	o date	Unwrought		Otl	Other	
		Customs		Customs					
Source	Quantity	value	Quantity	value	Quantity	Year to date	Quantity	Year to date	
Australia	1,860	\$2,500,000	19,100	\$26,200,000					
Belgium	56	100,000	526	933,000				(2/)	
Canada						(2/)		16	
China	234	262,000	649	793,000	360	4,280	5	113	
France								43	
Germany			68	277,000	305	3,280		24	
Greece	276	357,000	845	1,080,000					
Hong Kong			126	129,000					
Ireland	548	770,000	5,190	6,900,000					
Japan	98	125,000	1,260	2,080,000				11	
Mexico			25	184,000					
Netherlands			91	122,000			4	66	
Poland								20	
South Africa	470	662,000	2,430	3,500,000	890	10,100			
Spain					10	148			
United Kingdom			93	130,000		46		(2/)	
Total	3,540	4,780,000	30,400	42,300,000	1,570	17,800	9	294	
Total, general imports	3,540	4,780,000	30,400	42,400,000	1,570	17,800	9	294	

⁻⁻ Zero

Note: Imports for consumption of metallic manganese waste and scrap totaled 33 tons, all of which was from Canada, to give a year-to-date total of 2,210 tons.

 $^{1/\,\}mbox{Quantities}$ for general imports and imports for consumption are identical.

^{2/} Data are rounded to no more than three significant digits; may not add to totals shown.

 $^{3\!/}$ All or part of these data have been referred to the U.S. Census Bureau for verification.

 $^{1/\,\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Less than 1/2 unit.

$TABLE\ 6$ U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN 2002 1/

(Metric tons, gross weight)

				anganese,					
	Manganese ore		2% o	2% or less C		Silicomanganese		Manganese metal 2/	
	October	Year to date	October	Year to date	October	Year to date	October	Year to date	
Australia		155		5		21			
Belgium								484	
Brazil		151		8		11		5	
Canada	141	2,300	317	5,220		243	9	163	
China		1,190						67	
Colombia								8	
Dominican Republic		31							
Ecuador								1	
France						27			
Germany	39	1,820						9	
Ghana				16					
Hong Kong		18				1		1	
Indonesia		30				4			
Italy		1,260						15	
Japan				60			104	885	
Korea, Republic of		48						19	
Malaysia								4	
Mexico	102	2,090	23	933		67	10	89	
Netherlands	35	1,620	6	6		8		2	
Norway		457						3	
Poland		634							
Saudi Arabia								20	
Singapore								(3/)	
Spain						8			
Sri Lanka						5			
Sweden		409					19	106	
Switzerland		99							
Taiwan		15						26	
Trinidad and Tobago				10	20	20			
Turkey				3					
United Kingdom		265						(3/)	
Venezuela		119		7					
Total	317	12,700	346	6,270	20	415	142	1,910	

⁻⁻ Zero.

Note: Exports of ferromanganese with more than 2% carbon totaled 320 tons, all of which went to Canada, to give a year-to-date total of 2,320 tons.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Includes manganese-aluminum, some other alloys, and waste and scrap.

^{3/} Less than 1/2 unit.

TABLE 7
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN OCTOBER 2002, BY CLASS 1/

					Year to date			
			Principal sources and destinations:			Principal sources and destinations:		
	Gross weight	Value 2/	gross weight (metric tons);	Gross weight	Value 2/	gross weight (metric tons);		
Class	(metric tons)	(thousands)	value 2/ (thousands)	(metric tons)	(thousands)	value 2/ (thousands)		
Imports for consumption:								
Manganese oxides other than dioxide	305	\$253	Mexico 148; \$53	1,980	\$1,970	Mexico 1,160; \$399		
Sulfates, basket category,								
including manganese sulfate	2,470	1,090	China 1,800; \$561	32,900	18,400	Mexico 14,800; \$7,650		
Potassium permanganate	64	127	India 36; \$72	1,310	2,280	Czech Republic 582; \$1,120		
Manganites, manganates, and								
other permanganates	17	80	Germany 17; \$80	240	855	Germany 166; \$790		
Exports:								
Manganese dioxide	364	395	Canada 145; \$47	3,100	3,330	Canada 1,670; \$575		
Manganese oxides other than dioxide	631	727	Canada 313; \$117	4,580	4,790	Canada 2,820; \$1,110		
Sulfates, basket category,								
including manganese sulfate	1,920	945	Canada 1,670; \$503	16,300	9,380	Canada 13,600; \$4,100		
Potassium permanganate	273	510	Spain 208; \$380	851	1,640	Canada 315; \$568		
Manganites, manganates, and								
other permanganates			XX	170	881	Japan 93; \$455		

XX Not applicable. -- Zero.

^{1/} Data are rounded to no more than three significant digits.

^{2/} For imports, Customs value; for exports, f.a.s. value.